

AMENDMENTS

In the Claims:

This listing of claim replaces all prior versions, and listings, of claims in the application:

1. (Previously Presented) A semiconductor device manufacturing method, comprising:
providing a semiconductor wafer provided with a plurality of metal portions on a surface of the semiconductor wafer;

suspending the semiconductor wafer on a plurality of pins in a reflow furnace so that the metal portions are positioned upwardly in the reflow furnace;

reflowing the metal portions on the surface of the semiconductor wafer suspended in the reflow furnace so that the metal portions form conductive terminals using a first heater disposed in the reflow furnace and facing the surface of the semiconductor wafer.

2. (Cancelled)

3. (Previously Presented) The semiconductor device manufacturing method of claim 1, wherein the pins are mounted on a stage that is heated by a heating plate disposed under the stage.

4. (Original) The semiconductor device manufacturing method of claim 1, wherein the semiconductor wafer is heated by a second heater disposed so as to face a lateral edge of the semiconductor wafer.

5. (Original) A semiconductor device manufacturing method, comprising:
providing a semiconductor wafer provided with a pair of first wirings on a front surface of the semiconductor wafer;

attaching a first supporting substrate to the front surface of the semiconductor wafer;
attaching a second supporting substrate to a back surface of the semiconductor wafer;
partially exposing the first wirings by forming a groove through the semiconductor wafer;
forming second wirings connected to exposed portions of the first wirings and extending to a surface of the second supporting substrate;

forming a plurality of metal portions on the second wirings;

supporting the semiconductor wafer using a plurality of pins that are in contact with the first supporting substrate; and

reflowing the metal portions so as to form conductive terminals using a first heater disposed to face the back surface of the semiconductor wafer while the semiconductor wafer is supported by the pins.

6. (Original) The semiconductor device manufacturing method of claim 5, wherein the pins are mounted on a stage that is heated by heating plates disposed underneath the stage.

7. (Original) The semiconductor device manufacturing method of claim 5, wherein the semiconductor wafer is heated by a second heater disposed so as to face a lateral edge of the semiconductor wafer.

8. (Original) A semiconductor device manufacturing method, comprising:
preparing a semiconductor wafer provided with a pair of first wirings on a front surface of the semiconductor wafer;

attaching a supporting substrate to the front surface of the semiconductor wafer;
partially exposing the first wirings by forming a groove from a back surface of the semiconductor wafer;

forming second wirings connected to exposed portions of the first wirings and extending to the back surface of the semiconductor wafer;

forming a plurality of metal portions on the second wirings,
supporting the semiconductor wafer using a plurality of pins that are in contact with the supporting substrate; and

reflowing the metal portions so as to form conductive terminals using a first heater disposed to face the back surface of the semiconductor wafer while the semiconductor wafer is supported by the pins.

9. (Original) The semiconductor device manufacturing method of claim 8, wherein the pins are mounted on a stage that is heated by heating plates disposed underneath the stage.

10. (Original) The semiconductor device manufacturing method of claim 8, wherein the semiconductor wafer is heated by a second heater disposed so as to face a lateral edge of the semiconductor wafer.

11. (New) The semiconductor device manufacturing method of claim 1, further comprising removing the semiconductor wafer from the pins after the reflow of the metal portions.